

Report to the Chairman, Subcommittee on Readiness, Committee on Armed Services, U.S. Senate

**July 1997** 

# AFLOAT PREPOSITIONING

Not All Equipment Meets the Army's Readiness Goal





United States General Accounting Office Washington, D.C. 20548

National Security and International Affairs Division

B-277122

July 23, 1997

The Honorable James M. Inhofe Chairman, Subcommittee on Readiness Committee on Armed Services United States Senate

Dear Mr. Chairman:

This report provides information on the readiness of the Army's war reserve equipment prepositioned afloat. Specifically, this report discusses the extent to which the brigade set of war reserve equipment, which is prepositioned on ships, meets the Army's readiness goal. It also addresses the status of the Army's efforts to establish facilities to maintain this brigade set of equipment and develop an information system that accurately measures and reports the readiness condition of war reserve equipment.

### Background

The Department of Defense (DOD) maintains stocks of supplies and equipment, called war reserves, to support military units during a war or mobilization. War reserves stored within the continental United States are distributed as needed by airlift or sealift. War reserves are also stored, or prepositioned, overseas on land or on ships near an area of potential conflict. By prepositioning war reserves overseas, U.S. military forces have the ability to respond quickly to a contingency. For example, at the beginning of the Persian Gulf War deployment in August 1990, equipment and supplies prepositioned aboard ships arrived at the theater more quickly than if they had been sealifted from the United States. At that time, the Army's prepositioning fleet consisted of four ships used primarily for carrying ammunition and port handling equipment.

Because afloat prepositioning proved successful during the Persian Gulf War, DOD's January 1992 Mobility Requirements Study identified a need for the Army to preposition additional combat, combat support, and combat service support equipment and supplies aboard ships.<sup>2</sup> Later that year, we reported on the Army's use of prepositioning ships during the Persian Gulf War and examined Army plans to expand its prepositioning fleet by adding

<sup>&</sup>lt;sup>1</sup>Afloat prepositioning involves keeping ships continuously stored with supplies, combat equipment, and support items.

<sup>&</sup>lt;sup>2</sup>This requirement was revalidated in the 1995 Mobility Requirements Study Bottom-Up Review Update.

roll-on/roll-off ships to accommodate additional equipment to support a brigade.<sup>3</sup> We recommended that the Army plan for and provide resources for maintaining its additional equipment on prepositioned ships.

The brigade set of equipment, which is prepositioned afloat, consists of 145 individual unit sets of equipment for an armored combat brigade and combat support and service support units. Specific pieces of combat equipment include tanks and infantry fighting vehicles for 4,500 soldiers. Combat support and combat service support equipment for an additional 5,300 soldiers includes multiple launch rocket systems, self-propelled howitzers, cargo trucks, tractors, chemical detection and decontamination equipment, and communications gear.

The Army's general standard for maintaining equipment is the Technical Manual –10/-20 standard. It requires that equipment be maintained in near-perfect operating condition and capable of performing all assigned missions. The Army reports the readiness of unit sets and the brigade set of equipment according to Army Regulation 220-1, Unit Status Reporting. This regulation measures readiness in terms of a lower, fully mission capable standard that only requires that mission-essential subsystems be available and operational. As a result, a vehicle with a cracked windshield might not meet the -10/-20 standard but could be considered fully capable of performing its war-fighting mission. The Army's readiness goal is that 90 percent of the equipment in the prepositioned brigade set meets the fully mission capable standard. For readiness purposes, the Army reports the status of 51 of the 145 unit equipment sets prepositioned afloat. These 51 unit equipment sets are authorized to contain primary weapon systems or equipment considered critical for accomplishing and sustaining a unit's mission.

In August 1993, the Deputy Secretary of Defense designated Charleston Naval Weapons Station in South Carolina as the site for development of a maintenance base for the brigade set of equipment. In late fall 1993, the Army began loading available equipment aboard seven roll-on/roll-off ships that had been added to its prepositioning fleet. To maintain the brigade set of equipment, the Army hired contractors to (1) modify existing maintenance facilities and construct new facilities at the base, (2) develop and implement a program for cyclical maintenance operations,

<sup>&</sup>lt;sup>3</sup>Military Afloat Prepositioning: Wartime Use and Issues for the Future (GAO/NSIAD-93-39, Nov. 4, 1902)

<sup>&</sup>lt;sup>4</sup>The Technical Manual -10/-20 standard is based on preventive maintenance checks and services for each piece of Army equipment. The "-10" and "-20" refer to operator- and organization-level maintenance tasks, respectively.

and (3) develop an automated information system to manage maintenance and inventory operations and report on the condition of war reserve equipment.

In February 1995, the Army contracted with the developers of the Marine Corps' inventory system to create an automated inventory system to meet Army prepositioned war reserve requirements. This system is expected to, among other things, maintain an accurate accountability of items, compare authorized and on-hand quantities, and report on the maintenance and readiness status of war reserve equipment. In March 1996, the Army established the War Reserve Support Command to manage its war reserve program as a subordinate command of the Industrial Operations Command and the Army Materiel Command.

### Results in Brief

Of the unit sets considered when reporting the readiness of the brigade set of war reserve equipment, about 25 percent do not meet the Army's readiness goal for full mission capability. As of April 1997, equipment in 13 of 51 reportable unit sets did not meet the 90-percent readiness goal. Five of those unit sets did not have on hand authorized primary weapon systems or equipment considered critical for accomplishing and sustaining the units' mission. As a result, these five unit sets had a fully mission capable rating of zero. According to Army maintenance records, some equipment aboard prepositioning ships had been reported as non-mission capable since September 1995. These records also erroneously identified some non-mission capable equipment as repairable aboard ship, although Army officials said that many repairs could not be made until the equipment was downloaded.

One factor that contributed to lower readiness rates was that some equipment was not fully mission capable when it was originally loaded on prepositioning ships. Other factors include the deterioration of the equipment while in storage aboard ships and the limited ability to conduct maintenance on the equipment while in storage. The Army plans to repair equipment that does not meet readiness standards by conducting maintenance on prepositioning ships every 30 months. In addition, Army doctrine calls for logistics support teams to perform maintenance on prepositioned war reserve equipment when it is downloaded before a deployment. Further, the Army is currently transferring equipment to prepositioning ships that have been designed to better control the humidity of the shipboard environment. This improved environment should help reduce the amount of deterioration of equipment while it is

stored aboard prepositioned ships. Further, the Army has given priority to prepositioned ships in its plans to redistribute equipment from central Europe; this should improve the readiness of those unit sets currently lacking equipment required for meeting the Army's readiness goal.

Army maintenance facilities in Charleston, South Carolina, were originally scheduled to be completed before October 1996—in time for the facilities to be used to conduct maintenance on the first full shipload of equipment prepositioned afloat. However, contracts for development of the site and construction and renovation of buildings had not been completed, and the maintenance contractor had to continue to rely on temporary shelters and had to develop less efficient maintenance processes. According to Army and contractor officials, the use of temporary facilities did not prevent the successful completion of the maintenance mission. They said the impact was limited to a slight but unquantifiable increase in the cost of maintaining the equipment.

Basic elements of the Army's automated inventory system for management of war reserves have been put in place, including maintenance and readiness reporting software modules. As of July 1997, the Army was still developing and implementing its information system. Proposed improvements to the system include linking the system database to existing Army maintenance management systems and incorporating a requisitioning capability.

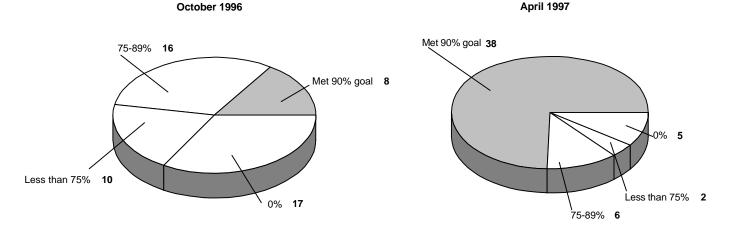
### Not All Equipment Prepositioned Afloat Meets Army Readiness Goal

As of April 1997, 13 of the 51 unit sets of equipment that are assigned to Army prepositioning ships and considered for readiness reporting, or about 25 percent, did not meet the Army's readiness goal that 90 percent of available war reserve equipment be fully mission capable. Equipment in two unit sets was less than 75 percent fully mission capable, and five unit sets had a fully mission capable rating of zero because they did not have on hand any authorized primary weapon systems or equipment considered critical for accomplishing and sustaining a unit's mission. For example, one unit set designated to support a heavy equipment transport company did not have any of its authorized trucks or trailers.

The status of the equipment in April 1997 had significantly changed from October 1996, when 43 of the 51 unit sets did not meet the Army's goal. At that time, equipment in 10 unit sets was less than 75 percent fully mission capable, and 17 unit sets had a fully mission capable rating of zero because they did not have any of their authorized reportable equipment on hand.

Army officials attributed the improvement as of April 1997 primarily to the transfer of key pieces of equipment considered for readiness reporting from lower priority units not considered for readiness reporting to higher priority units that are considered for readiness reporting. The officials said that maintenance on the equipment between October 1996 and April 1997 also contributed to the increase in the number of unit sets that met the Army's readiness goal. Figure 1 compares the status of equipment sets in October 1996 and April 1997.

Figure 1: Number of Equipment Sets That Did Not Meet the Army's Readiness Goal in October 1996 and April 1997



Note: The unit sets that had a fully mission capable rating of zero did not have any reportable equipment on hand.

Source: Our analysis of War Reserve Support Command data.

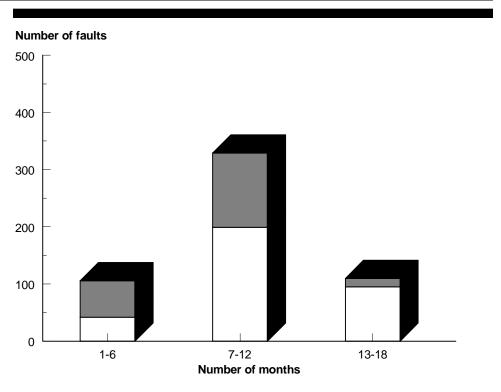
According to Army and contractor officials, many of the faults that render equipment non-mission capable do not require extensive maintenance to repair. Army officials said that many of the pieces of equipment that were considered non-mission capable needed only replacement of missing fire extinguishers and dead batteries. However, our review of maintenance records showed that, as of April 1997, missing fire extinguishers and dead

 $<sup>^5</sup>$ This accountability transfer occurred within the automated information system and did not require actual movement of the equipment.

batteries only accounted for about 11 percent of the total non-mission capable faults reported for equipment prepositioned afloat.<sup>6</sup>

The Army's equipment status data, as of April 1997, showed that faults rendering specific pieces of equipment non-mission capable had remained uncorrected since September 1995. Figure 2 shows the amount of time that uncorrected faults have rendered equipment prepositioned afloat non-mission capable and the portion of those faults that the Army considered to be repairable while in storage aboard prepositioning ships.

Figure 2: Amount of Time That Uncorrected Faults Have Rendered Equipment Non-Mission Capable (as of Apr. 1997)



☐ Repairable aboard ship ☐ Repairable off ship only

Note: Data reflects all ships as of April 1997 with the exception of one for which data was only available as of January 1997.

Source: Our analysis of War Reserve Support Command data.

<sup>&</sup>lt;sup>6</sup>Defective seals and gaskets accounted for an additional 8 percent of the faults rendering equipment non-mission capable. The remaining faults were almost all different and therefore could not be easily categorized.

According to the Army's April 1997 Warfighter Equipment Status Report, about 60 percent of the faults that rendered equipment non-mission capable were repairable aboard ship. However, this designation is misleading. Army officials said that many of these faults are impossible to repair until the equipment is taken off the ship because of the heavy weight of items and lack of maneuverability, among other things. Thus, the information in the report does not accurately represent the ability of maintenance personnel to repair faults that render equipment non-mission capable.

### Key Factors Contributed to Lower Readiness Rates

In October 1995, the Army Inspector General reported that maintenance standards were not enforced during the initial loading of the brigade set of equipment aboard Army ships in the fall of 1993.8 As a result, during Operation Vigilant Warrior in October 1994, the actual fully mission capable rate of the equipment downloaded from five of the seven roll-on/roll-off ships was significantly less than reported. According to the report, most of this equipment required maintenance before deploying, and several pieces of equipment were not cost-effective to repair. The report also stated that the readiness of the deployed equipment improved as a result of Army maintenance efforts during the operation.

Also, Army and maintenance contractor officials said that the tendency of equipment to deteriorate while in storage aboard ships continually lowers readiness rates. For example, gaskets and seals dry rot, tires go flat, equipment rusts, and batteries die.

Further, Army officials and contractors stated that the ability of shipboard maintenance teams to conduct inspections and maintenance on equipment prepositioned aboard ships is limited due to the lack of accessibility to equipment and environmental concerns regarding the use of oil and other hazardous substances. As a result, the teams are only able to (1) perform minor maintenance, such as replacing batteries, changing filters, and tightening plugs; (2) make visual inspections to check for fluid leaks, loss of tire pressure, the condition of glass, lights, and fire extinguisher, and the presence of required documentation and inventory labels; and (3) start vehicles periodically and check their instrumentation. Because of the

<sup>&</sup>lt;sup>7</sup>This data reflects the condition of equipment prepositioned afloat as of April 3, 1997, with the exception of equipment aboard one ship for which such information was unavailable. To complete the data set and include all equipment aboard ships, we used data available as of January 31, 1997, for that ship.

<sup>&</sup>lt;sup>8</sup>Assessment of Army War Reserve Materiel, Army Inspector General, October 1995.

limitations on inspections, Army officials said that the condition of equipment prepositioned afloat could not be definitively determined until each ship was fully unloaded and inspected.

## Army Plans to Improve Equipment Readiness

The Army has recognized the need to conduct repairs on equipment that deteriorates in storage or does not meet Technical Manual -10/-20 standards. In addition to planned maintenance cycles every 30 months, Army doctrine calls for an Army Materiel Command logistics support team to provide limited depot-level maintenance support to fix many of the uncorrected equipment faults after the equipment is downloaded and accountability of the equipment is transferred to the war-fighting units during deployments.

The Army is currently transferring equipment aboard the seven roll-on/roll-off ships to five larger temporary ships and then ultimately to eight new Large Medium-Speed Roll-On/Roll-Off ships by 2000. These prepositioning ships have been designed to provide a better controlled-humidity environment below deck, which should help reduce the deterioration of equipment while stored aboard the ships. The Army plans to inspect the equipment as it is transferred between ships, repair the equipment that does not meet Technical Manual –10/-20 standards, and modernize equipment as needed. In addition, the eight new ships will more than double the amount of space available to store equipment prepositioned afloat.

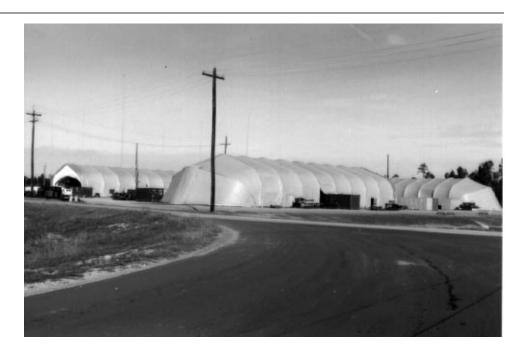
To improve the readiness of unit equipment sets aboard prepositioning ships, the Army has given priority to the afloat program in its plans to redistribute equipment from central Europe. As the unit sets aboard prepositioning ships are filled, readiness rates should improve.

As of April 1997, equipment on four ships had been fully unloaded. According to Army maintenance plans, the equipment aboard the remaining three ships will be downloaded and restored to -10/-20 standards by June 1998. However, officials in the Office of the Deputy Chief of Staff for Logistics said that the Army may withhold \$18 million in funding from the fiscal year 1997 afloat prepositioning program to help pay for operations in Bosnia. These officials stated that this reduction could prevent equipment prepositioned afloat from being maintained at Technical Manual -10/-20 standards. As a result, equipment loaded onto prepositioning ships later this year may be maintained only to the fully mission capable level.

# Status of Maintenance Facility Construction

The Army received a total of \$45.7 million in fiscal year 1995 and 1996 appropriations for construction of a maintenance facility at Charleston, South Carolina. The site preparation and the initial phase of construction were originally scheduled to be completed before October 1996—in time for the facilities to be used to conduct maintenance on the first full shipload of the brigade set of equipment, which is prepositioned afloat. However, contractors did not complete scheduled construction and renovation projects in time. As a result, the maintenance contractor had to continue to rely on temporary shelters instead (see fig. 3) and had to develop less efficient maintenance processes.

Figure 3: Temporary Maintenance Shelters at the Charleston, South Carolina, Site





According to Army officials, the construction delays were primarily due to poor soil conditions and the removal of unanticipated hazardous waste, such as asbestos and pigeon droppings, from existing structures. The officials said that the continued reliance on temporary maintenance facilities did not delay the successful upload of fully mission capable equipment. They also said that the only discernable impact of these less efficient working conditions was a slight but unquantifiable increase in the amount of overtime charged to the contract. The Army plans to complete the transition of maintenance operations from the temporary shelters to the permanent facilities in fall 1997. In accordance with the original facility funding plan, the Army requested \$7.7 million in fiscal year 1998 for further construction at the site, making the total estimated cost for the facility \$53.4 million.

### Status of War Reserve Information System

The Army awarded a contract in February 1995 to develop an automated inventory system to manage its prepositioned war reserves. Upgrades to the system were subsequently developed to collect and report maintenance and readiness data. Until July 1996, the Army reported the readiness of war reserve equipment sets in terms of the full mission capability of the 20 most important weapon systems. At that time, the Army established a requirement for reporting the readiness condition of the equipment in accordance with Army Regulation 220-1, <u>Unit Status</u> Reporting.

In January 1997, the Army began having difficulty developing and implementing that portion of the information system designed to report the readiness of war reserve equipment. For example, the Army's January 1997 quarterly report was not produced on time and did not accurately portray the true readiness condition of war reserve equipment. These problems were the result of software changes that had not been adequately evaluated. Specifically, changes in equipment data tables caused the software to omit some equipment from the report. Army officials said that they resolved software problems for the April 1997 readiness report by reverting to the equipment data tables used before the software upgrade.

As of July 1997, the Army was still developing and implementing its information system. The projected total cost of the Army's contract through September 1997 was about \$17 million. Army officials estimated

<sup>&</sup>lt;sup>9</sup>According to Army officials in Charleston, pigeon droppings are considered hazardous waste because exposure may cause histoplasmosis. This disease is a fungal infection that most often occurs in the lungs.

that development costs of the system were about \$9.5 million and that the costs of the contractors' test, implementation, operation, and other support efforts were about \$7.5 million. Proposed improvements to the system include linking the system database to existing Army maintenance management systems and incorporating a requisitioning capability.

### Recommendations

Because of the tendency for equipment to deteriorate while prepositioned aboard ships and the inherent limitations in the Army's ability to conduct maintenance aboard ships, we recommend that the Secretary of Defense direct the Secretary of the Army to ensure that unit sets of equipment that affect the readiness of the brigade set are filled to their authorized levels and that the equipment is maintained at the Army's Technical Manual –10/-20 standards before it is loaded onto prepositioning ships. These actions would increase the probability that the Army's goal of 90 percent full mission capability is achieved.

To improve the quality of Army equipment status reporting, we recommend that the War Reserve Support Command, along with intended users of the Warfighter Equipment Status Reports, establish more accurate designations for the status of non-mission capable equipment. These designations should differentiate among items that can be repaired aboard ship, items that are to be repaired by the logistics support team upon download before deployment, and items that may not be readily repaired and should be replaced.

## **Agency Comments**

In its comments on a draft of this report, DOD concurred with our recommendations and stated that several ongoing initiatives are aimed at improving the readiness of Army equipment prepositioned afloat. For example, DOD indicated that a multistage sealift modernization program would improve readiness by transferring equipment from existing ships to newer and larger vessels specially designed to store equipment at sea. DOD stated that, as equipment is moved between ships, it will be upgraded to the Technical Manual –10/-20 standards cited in our report. Also, DOD stated that the Army is improving an information reporting system to enhance visibility into equipment readiness. This action is consistent with one of our recommendations. DOD's comments appear in appendix I.

# Scope and Methodology

To determine the extent to which war reserve equipment prepositioned afloat met the Army's readiness goal and the key factors contributing to the condition of the equipment, we analyzed monthly Warfighter Equipment Status Reports developed by the Army's maintenance contractor and materiel condition status reports used for readiness reporting developed by the Army's information systems contractor. We did not validate the computer-generated data in these status reports; however, we discussed data reliability and quality with agency officials, and they stated that the data was reliable and accurately reflected the condition of war reserve equipment. We determined the major factors that contributed to the current condition of the equipment by interviewing Army and maintenance contractor officials. We also interviewed these officials to obtain their views on the effect of the shipboard maintenance environment and observed shipboard storage conditions. We obtained maintenance records and information on Technical Manual -10/-20 standards and discussed them with Army and maintenance contractor officials.

To determine the status of the Army's efforts to establish facilities to maintain war reserve equipment, we observed ongoing construction projects, including those at the wharf, staging areas, roadways, and maintenance facilities. We also observed the maintenance contractor's use of temporary maintenance shelters. We examined records of construction contractors' performance and interviewed Army and maintenance contractor officials to determine the effect of the incomplete facilities on the maintenance cycle. We obtained cost data on the construction projects from Army officials.

To determine the status of the Army's efforts to develop information systems to accurately measure and report the readiness condition of war reserve equipment, we obtained and discussed information on the status of the system with the automated information systems contractor. We also talked with Army officials at the Combat Equipment Group—Asia—Charleston Naval Weapons Station, South Carolina; Deputy Chiefs of Staff for Operations and Plans and for Logistics, Office of the Secretary of the Army, Washington, D.C.; and the War Reserve Support Command, Rock Island, Illinois.

We conducted our review from August 1996 to July 1997 in accordance with generally accepted government accounting standards.

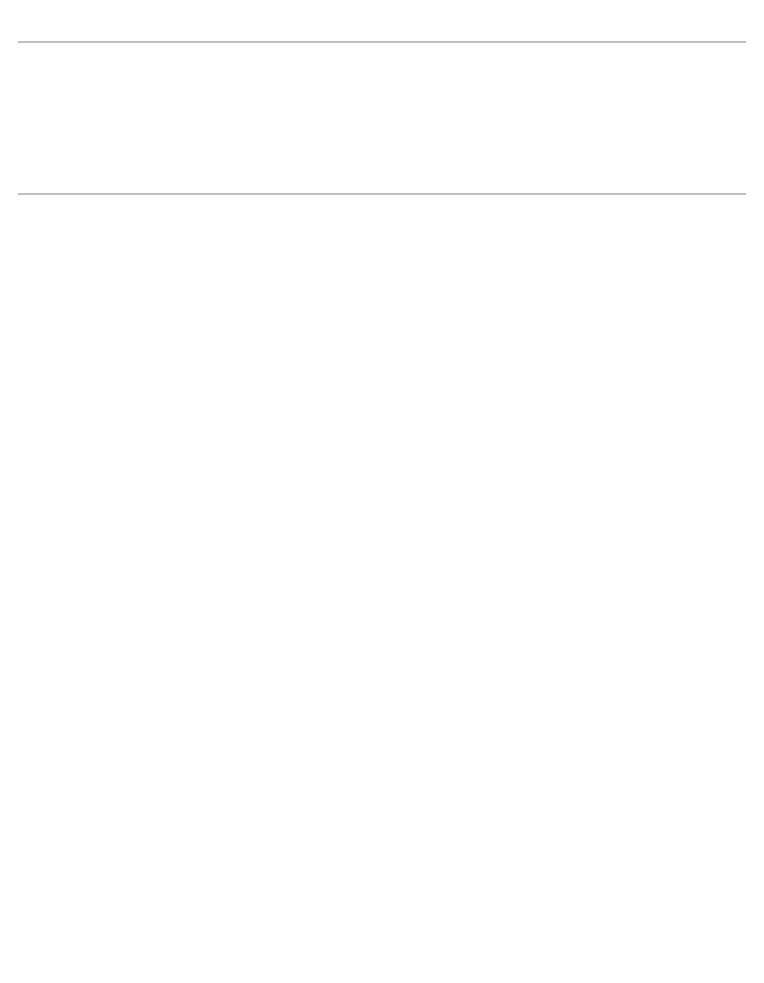
We are sending copies of this report to the Ranking Minority Member, Subcommittee on Readiness, Senate Committee on Armed Services; the Chairmen and Ranking Minority Members, Senate and House Committees on Appropriations; and the Secretaries of Defense and the Army. Copies will also be made available to others on request.

Please contact me at (202) 512-5140 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix II.

Sincerely yours,

Mark E. Gebicke

Director, Military Operations and Capabilities Issues

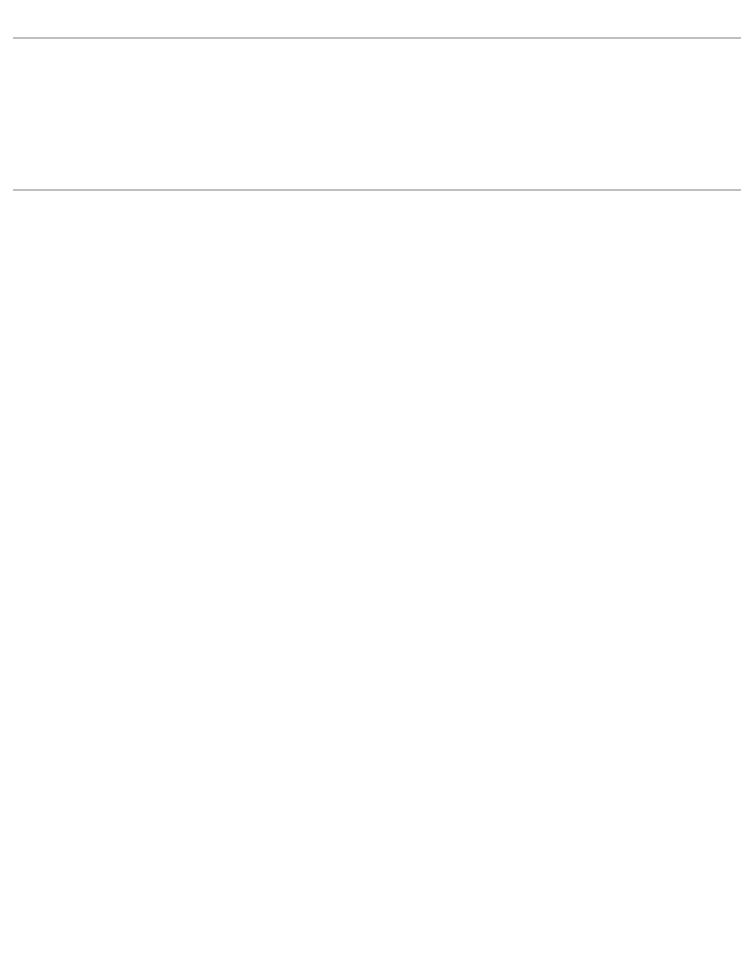


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### **Abbreviations**

DOD Department of Defense



## Comments From the Department of Defense



## OFFICE OF THE SECRETARY OF DEFENSE 1800 DEFENSE PENTAGON WASHINGTON, D.C. 20301-1800



July 8, 1997

Mr. Mark E. Gebicke Director, Military Operations and Capabilities Issues National Security and International Affairs Division U.S. General Accounting Office Washington D.C. 20548

Dear Mr. Gebicke:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "AFLOAT PREPOSITIONING: Not All Equipment Meets Army's Readiness Goal," dated May 28, 1997 (GAO code 703159; OSD case 1372). The DoD concurs with the report.

Several ongoing initiatives are aimed at improving the readiness of Army equipment prepositioned afloat. A multi-stage sealift modernization program will improve readiness by transferring equipment from existing ships to newer and larger vessels specially designed to store equipment at sea. Equipment will first be transferred to newly-converted and then to newly-constructed large medium-speed roll-on/roll-off (LMSR) vessels; these transfers will be complete by FY 1998 and FY 2001, respectively. As equipment is moved between ships it will be upgraded to the -10/-20 standards cited in your report. The Army is also improving an information reporting system to enhance visibility into equipment readiness, an action consistent with a recommendation contained in the GAO report.

Detailed DoD comments on the findings and recommendations of the report are provided in the enclosure. Thank you for the opportunity to comment on the report.

Sincerely.

mam J.

Enclosure



Appendix I
Comments From the Department of Defense

#### GAO DRAFT REPORT DATED MAY 28, 1997 (GAO CODE 703160; OSD CASE 1372)

## "AFLOAT PREPOSITIONING: NOT ALL EQUIPMENT MEETS ARMY'S READINESS GOAL"

#### DEPARTMENT OF DEFENSE COMMENTS

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#### **FINDINGS**

FINDING A: Not All Equipment Prepositioned Afloat Meets the Army Readiness Goal. The GAO stated that, as of April 1997, 13 of the 51 unit sets of equipment that are assigned to Army prepositioning ships and considered for readiness reporting, or about 25 percent, did not meet the Army's readiness goal that 90 percent of available war reserve equipment be fully mission capable. (Page 5/GAO Draft Report)

**DOD RESPONSE:** Concur. The Army is executing a plan to meet the readiness goal for equipment prepositioned afloat by the end of FY 1998. By this date, the seven Ready Reserve Fleet (RRF) roll-on/roll-off (RO/RO) ships currently in use will be replaced by five newly-converted large medium-speed roll-on/roll-off (LMSR) vessels. As noted in the GAO report, the Army intends to repair any gear not meeting the -10/-20 standards before it is transferred between the ships. A key element of the Army's plan was achieved in June 1997 when the USNS Shugart, a newly-converted LMSR, was loaded with a full complement of equipment, all of which was fully mission capable and met the -10/-20 standard. Should future circumstances require that a LMSR be loaded with a piece of equipment with a deficiency that prevents it from meeting the -10/-20 standard, Army plans call for the deficiency to be corrected at the first available opportunity, either during routine shipboard maintenance, during an exercise or maintenance cycle, or during a deployment in which case it would be upgraded by a shore-based logistics support element prior to being issued to combat troops.

FINDING B: Status of Construction of Army Maintenance Facility. The GAO reported that the Army received \$45.7 million in FY 1995 and 1996 appropriations for construction of a maintenance facility at Charleston, South Carolina. The site preparation and the initial phase of construction were originally scheduled to be completed before October 1996--in time for the facilities to be used to conduct maintenance on the first full shipload of the brigade set of equipment prepositioned afloat. However, contractors did not complete scheduled construction and renovation projects in time. As a result, the maintenance contractor had to continue to rely on temporary shelters instead and develop less efficient maintenance processes. (Page 10/GAO Draft Report)

Now on pp. 4-7.

Now on pp. 9-11.

### Appendix I Comments From the Department of Defense

**DOD RESPONSE:** Concur. Construction of the Army maintenance facility has progressed but not without the unanticipated delays noted in the GAO report. Despite the delays, the Army has maintained its schedule for ship loading and equipment maintenance. Moreover, the Army expects to complete the project in the fall of 1997 within its original budget of \$53.4 million, which included \$7.7 million in FY 1998.

FINDING C: Status of Army Efforts to Develop Management Information System for War Reserves. The GAO reported that the Army awarded a contract in February 1995 to develop an automated inventory system to manage its prepositioned war reserves. Upgrades to the system were subsequently developed to collect and report maintenance and readiness data. As of May 1997, the Army was still developing and implementing its information system. The projected total cost of the Army's contract through September 1997 was about \$17 million. (Page 11/GAO Draft Report)

**DOD RESPONSE:** Concur. The Army continues to make progress towards the development of an information system for war reserves. As often occurs with newly-developed software, unanticipated problems have arisen that have required corrective action. System upgrades will be made until the Army fully achieves its goal of linking the system database to existing maintenance management systems and incorporating a requisitioning capability.

\*\*\*\*

#### RECOMMENDATIONS

**RECOMMENDATION 1:** Because of the tendency for equipment to deteriorate while prepositioned aboard ships and the inherent limitations in the Army's ability to conduct maintenance aboard ships, the GAO recommended that the Secretary of Defense direct the Secretary of the Army to ensure that unit sets of equipment that affect the readiness of the brigade set are filled to their authorized levels and that the equipment is maintained at the Army's Technical Manual -10/-20 standards before it is loaded onto prepositioning ships. The GAO believes that these actions would increase the probability that the Army's goal of 90-percent full mission capability is achieved. (Page 12/GAO Draft Report)

**DOD RESPONSE:** Concur. The DoD agrees that filling the brigade unit sets to their authorized levels and maintaining their equipment at the -10/-20 standards would ensure attainment of the Army's readiness goal. As noted in the GAO report, the Army's afloat prepositioned program is in the midst of a multistage transition period that will conclude in FY 2001 with the loadout of the last of eight newly-constructed LMSR ships. Throughout this transition period, the Army plans to inspect the equipment as it is transferred between ships, repair the equipment that does not meet -10/-20 standards, increase the amount of prepositioned cargo, and modernize equipment as needed. The DoD will monitor these efforts to ensure that Army equipment readiness goals are achieved.

Now on pp. 11-12.

Appendix I Comments From the Department of Defense

**RECOMMENDATION 2:** To improve the quality of Army equipment status reporting, the GAO recommended that the War Reserve Support Command, along with intended users of the Warfighter Equipment Status Reports, establish more accurate designations for the status of non-mission capable equipment. The GAO further recommended that these designations differentiate among items that can be repaired aboard ship, items that are to be repaired by the logistics support team upon download before deployment, and items that may not be readily repaired and should be replaced. (Page 12/GAO Draft Report)

**DOD RESPONSE:** Concur. The Army is making adjustments to the Warfighter Equipment Status Reports to provide more detail regarding equipment readiness at the operational level. By August 1997, the reports will be expanded to include new categories for tracking equipment that is repairable by shipboard maintenance crews, by logistic support elements/ashore maintenance teams, or by transfer to an ashore maintenance facility in which case a shipboard substitution would be necessary. The expanded reports will be used at the operational level. Higher-level management activities will continue to determine warfighter capabilities based on the readiness reporting system outlined in Army Regulation 220-1, Unit Status Reporting.

# Major Contributors to This Report

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